## **CLAIMS**

What is claimed:

20

25

- A method of enhancing the immunogenicity of a bacterial vaccine
   vector, the method comprising:
  - a) administering to an animal the bacterial vaccine vector;
  - b) passaging the bacterial vaccine vector through the animal:
  - c) harvesting the bacterial vaccine vector from the animal, and;
- d) repeating step a), step b), and step c) until a maximum bacterial load in an organ is reached, thereby enhancing the immunogenicity of the bacterial vaccine vector.
  - 2. The method of claim 1 wherein the organ is a spleen or liver.
- 3. The method of claim 1 wherein the bacterial vaccine vector expresses an antigen.
  - 4. The method of claim 3 wherein the antigen is a heterologous antigen.
    - 5. The method of claim 3 wherein the antigen is a tumor antigen.
  - 6. The method of claim 1, wherein the bacterial vaccine vector is a Listeria vaccine vector.
    - 7. The method of claim 1, wherein the animal is a mammal.
    - 8. The method of claim 7, wherein the mammal is a mouse.
- 9. The method of claim 1, wherein the bacterial vaccine vector is administered to the animal via oral or parenteral administration.

WO 2004/062597 PCT/US2004/000366

10. A bacterial vaccine vector having enhanced immunogenicity wherein the immunogenicity of the bacterial vaccine vector is enhanced by

- a) administering to an animal the bacterial vaccine vector;
- b) passaging the bacterial vaccine vector through the animal;
- c) harvesting the bacterial vaccine vector from the animal, and;
- d) repeating step a), step b), and step c) until a maximum bacterial load in an organ is reached.
- 11. The bacterial vaccine vector of claim 10 wherein the organ is a spleen or liver.

5

20

- 12. The bacterial vaccine vector of claim 10 wherein the bacterial vaccine vector expresses an antigen.
- 13. The bacterial vaccine vector of claim 12 wherein the antigen is a heterologous antigen.
  - 14. The bacterial vaccine vector of claim 12 wherein the antigen is a tumor antigen.
  - 15. The bacterial vaccine vector of claim 10, wherein the bacterial vaccine vector is a Listeria vaccine vector.
- 16. The bacterial vaccine vector of claim 10, wherein the animal is a mammal.
  - 17. The bacterial vaccine vector of claim 16, wherein the mammal is a mouse.
- 30 18. The bacterial vaccine vector of claim 10, wherein the bacterial vaccine vector is administered to the animal via oral or parenteral administration.

WO 2004/062597 PCT/US2004/000366

19. The bacterial vaccine vector of claim 10 wherein the bacterial vaccine vector comprises a pharmaceutically acceptable carrier.

- 20. A method of enhancing the immunogenicity of an antigen
  expressed from a bacterial vaccine vector, the method comprising:
  - a) administering to an animal the bacterial vaccine vector;
  - b) passaging the bacterial vaccine vector through the animal;
  - c) harvesting the bacterial vaccine vector from the animal, and;
- d) repeating step a), step b), and step c) until a maximum bacterial load in an organ is reached, thereby enhancing the immunogenicity of the antigen expressed from a bacterial vaccine vector.
  - 21. The method of claim 20 wherein the organ is a spleen or liver.
- 22. The method of claim 20 wherein the antigen is a heterologous antigen.
  - 23. The method of claim 20 wherein the antigen is a tumor antigen.
- 24. The method of claim 20, wherein the bacterial vaccine vector is a Listeria vaccine vector.
  - 25. The method of claim 20, wherein the animal is a mammal.
- 26. The method of claim 25, wherein the mammal is a mouse.
  - 27. The method of claim 20, wherein the bacterial vaccine vector is administered to the animal via oral or parenteral administration.
- 28. A kit comprising a bacterial vaccine vector having enhanced immunogenicity, wherein the kit comprises an applicator and an instructional material for use thereof.

WO 2004/062597 PCT/US2004/000366

29. The kit of claim 28 wherein the bacterial vaccine vector is lyophilized.

30. The kit of claim 28 wherein the kit further comprises a

5 pharmaceutically acceptable carrier.

10

15

20

25

30